

NOTES ON THE GENUS *ERATO*, WITH A LIST OF THE KNOWN
RECENT SPECIES.

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THE genus *Erato* has been monographed several times, and consisting of such small shells, mostly without any very striking features, it is not surprising that various errors of identification have occurred. The object of the present paper is an endeavour to clear up such mistakes, and to bring the list of species up to date. Having the Cuming Collection in the Museum I am in a position to offer some criticism upon the monographs by Sowerby and Reeve, as both were based upon that collection. The following is a list of the monographs and catalogues of species:—

1832. Gray: Descriptive Catalogue of Shells, *Cypræidæ*, pp. 16–17, no figures. Printed, but not published, *fide* C. Davies Sherborn.
1837. Sowerby, sen. (*a*): Conch. Illust., *Cypræidæ*, pp. 16–18, figd.
1842. Reeve (*a*): Conch. System, vol. ii, pp. 259–61, pl. 285.
1859. Sowerby, jun. (*b*): Thesaurus Conch., vol. iii, pp. 81–4, pl. 219.
1865. Reeve (*b*): Conch. Icon., vol. xv, three plates.
1870. Redfield: Amer. Journ. Conch., vol. vi, Appendix, pp. 216–20. A synonymic list of species.
1879. Weinkauff: Conchyl. Cabinet, *Marginella* and *Erato*, pp. 145–56, pls. xxv, xxvi.
1880. Weinkauff: Jahrbüch. deutsch. Malak. Ges., 1880, vol. vii, pp. 107–8. List of known species.
1883. Tryon: Manual Conch., vol. v, pp. 7–12, 197–8, pl. iv.

In the following list the above references will not be given in full, but merely quoted under the authors' names. The monograph by Gray, according to Mr. C. Davies Sherborn, exists only in a few proof-sheets printed in 1832, but never issued as a publication. It is quoted, however, by Redfield, who evidently must have had access to the work, for he could not have copied the references, since they do not appear in any previous monograph.

If, therefore, Gray's monograph be disregarded, it becomes necessary to assign another author to the species described in his unpublished work. Sowerby in his Conch. Illust. adopted all the four new species founded by Gray, giving him the credit of their authorship. Under these circumstances perhaps it would be advisable to allow Gray's name to be quoted, since this has been done in all subsequent works.

1. ERATO LÆVIS (DONOVAN).

(For references and synonymy see Redfield, p. 217.)

SYN. *Erato callosa*, Reeve (*b*), (*non* Adams & Reeve), figs. 2*a*-*b*.Perhaps *E.* (?) *Maugeria*, var. *Panamensis*, Carpenter, Proc. Zool. Soc., 1856, p. 162.= *T. sulcifera*, Sowerby (*b*), *partim* (*non* Gray), p. 81, pl. 219, fig. 3.= *T. Maugeria*, Reeve (*b*), figs. 10*a*-*b*.*Hab.*—Coasts of Great Britain, France, Spain, Mediterranean; Oran (Pallary for var. *minor*, 6 mm. long¹).

Beyond a difference in size it is difficult to find any distinguishing features between this species and the West Indian *E. Maugera*. It is subject to great variation in size, and among a number of specimens from Salcomb Bay, Devon, I find the largest to be 10 mm. in length, whereas the smallest is only 6. *E. Maugera* is perhaps more shortly pyriform, and at the upper part of the columella a small tubercle is generally observable, which does not occur, or is less noticeable, in *E. lævis*. The shells described by Carpenter as *E. Maugeria* (?), var. *Panamensis*, figured by Reeve as *Maugeria*, might with equal propriety be regarded as a variety of the present species, which they resemble so closely that one only hesitates to name them *E. lævis* because of the locality from which they are said to have come. One of the three shells described by Carpenter has been figured by Sowerby as a *E. sulcifera*, Gray, a much smaller granose shell which occurs at the Mauritius and elsewhere in the East. Reeve also has figured a small example of *E. lævis* as *E. callosa*, Ad. & Reeve, which is easily separated by the narrower aperture, excavated columella, and more finely denticulated labrum.

2. ERATO MAUGERÆ (GRAY), SOWERBY.

Erato Maugera, Gray, p. 17.*E. Maugeria*, Sowerby (*a*), p. 17, pl. vii, fig. 47; id. (*b*), p. 83, pl. 219, figs. 7-9.*E. Maugeria*, Reeve (*a*), p. 260, pl. 285, fig. 4.*E. Maugeria*, Weinkauff, p. 150, pl. xxv, figs. 13, 16.*E. Maugeria*, Tryon, p. 9, pl. iv, figs. 42, 43.*Hab.*—West Indies and Florida.

Never so large as *E. lævis*, otherwise very similar. It is sometimes pale flesh colour, or it may be olivaceous.

3. ERATO PRAYENSIS, ROCHEBRUNE.

Erato Prayensis, Rochebrune, Bull. Soc. Philom., 1881, vol. vi, p. 30;id., Nouv. Archiv. Mus., 1881, vol. iv, p. 294, pl. xvii, figs. 16*a*-*b*.*Hab.*—Porto-Praya, Cape Verd Islands.

I do not find anything in the brief description of this species to distinguish it from the West Indian *E. Maugera*. Nor does the

¹ Journ. de Conch., 1900, vol. xlviii, p. 307.

figure, which is evidently badly drawn, assist in its determination. However, not having seen specimens from the Cape Verde Islands, I hesitate to give an opinion upon the identity of this shell with *Maugeræ*. M. Germain kindly informs me that he has been unable to find this species in the Paris Museum, and that Dr. Rochebrune does not know where the specimens are which he described.

4. *ERATO MARGINATA*, Mörch.

Erato marginata, Mörch, Malak. Blätt., 1860, vol. vii, p. 85.

Hab.—Bocorones Island, near Panama.

Briefly described and unfigured. Colour not stated. Considered by Tryon probably the same as *E. columbella*. In my opinion it may be the same as *E. Maugeræ*. On inquiry of Dr. Levisen, of the Copenhagen Museum, he writes: "We cannot find *Erato marginata* either in our collection or in our registers."

5. *ERATO COLUMBELLA*, Menke.

Erato columbella, Menke, Zeitschr. f. Malak., 1847, p. 183; Sowerby (*b*), p. 83, figs. 31, 32; Reeve (*b*), figs. 1*a*-*b*; Weinkauff, p. 148, pl. xxv, figs. 9, 12 (9 bad); Tryon, p. 10, pl. iv, fig. 48 (after Sowerby).

E. leucophæa, Gould, Boston Journ. Nat. Hist., vol. vi, p. 386, pl. xiv, fig. 20; Otia, p. 187.

Hab.—Mazatlan (Menke); Santa Barbara (Gould); San Diego (Gripp and M. Smith); Monterey Bay (Berry).

I have placed *E. leucophæa* as a synonym of this species on the authority of Carpenter, Tryon, and others. Both the figure and description offer some points of difference.

6. *ERATO VITELLINA*, Hinds.

Erato vitellina, Hinds, Zool. Sulphur, p. 46, pl. xiii, figs. 22, 23; Sowerby (*b*), p. 83, figs. 27, 28; Reeve (*b*), figs. 3*a*-*b*; Weinkauff, p. 148, pl. xxv, figs. 6, 7; Tryon, p. 10, pl. iv, figs. 49, 50.

Hab.—California, Santa Barbara southward; San Diego (Gripp and M. Smith); Monterey Bay (Berry).

The largest species of the genus, and, like the rest, very variable in size, varying from 10 to 15 mm. in length. Mr. Joseph Keep, in his little book on "West American Shells", calls this species the "Veally Erato", but it seems to me that Reeve's designation of the species, the "Yolk Erato", is preferable. I fail to see that this shell has any connexion with veal or a young calf.

7. *ERATO ALBESCENS*, Dall.

Erato albescens, Dall, Nautilus, 1905, vol. xviii, p. 124.

Hab.—Deep water off Californian coast.

Length of shell, 15 mm. "This succeeds *E. vitellina*, Hinds, as the largest species of the genus, and is a much thinner and lighter shell, besides differing in colour" (Dall).

8. ERATO SCABRIUSCULA (Gray), Sowerby.

Erato scabriuscula, Gray, p. 16; Sowerby (*a*), p. 16, fig. 45; id. (*b*), p. 81, figs. 14–16; Reeve (*b*), figs. 4*a*–*b*; Weinkauff, p. 149, pl. xxv, figs. 10, 11; Tryon, p. 11, pl. iv, fig. 56 (after Reeve).

Marginella cypræola, Sowerby, Proc. Zool. Soc., 1832, p. 57; name preoccupied by Brocchi for a fossil (= *lævis*).

Marginella granum, Kiener, Coq. Viv., p. 17, pl. viii, fig. 33; Chenu's Illust. Conch., vol. iv, pl. iii, figs. 17, 17*a*; Chenu, Man. Conch., vol. i, p. 200, fig. 1067.

Hab.—St. Elena and Acapulco (Sowb.); Panama (C. B. Adams); Mazatlan (Jewett); west coast Central America to Mazatlan (Tryon).

The specific name *Cypræola*, suggested by Sowerby in 1832, had previously been employed by Brocchi for a fossil species (said to be the same as *E. lævis*) under the genus *Voluta*.

9. ERATO DENTICULATA, Pritchard & Gatliff.

Erato denticulata, P. & G., Proc. R. Soc. Victoria, 1900, vol. xii, p. 188; vol. xiii, p. 133, pl. xx, fig. 5.

Hab.—Victoria, Southern Australia.

I do not think it necessary to add anything to the author's admirable description of this species. In form it resembles in miniature some specimens of the British *E. lævis*, but of course is well distinguished by difference of coloration, more numerous labral denticulation, etc. It differs from *E. lachryma* (with which it has been united by Tate and May¹) and its varieties, in form, slightly wider aperture, rather less thickened labrum, finer and more marginal denticulation. The style of coloration is like that of typical *lachryma*, but much less pronounced.

10. ERATO OLIVARIA, Melvill.

Erato olivaria, Melvill, Ann. Mag. Nat. Hist., 1899, vol. iv, p. 91, pl. i, fig. 9.

Hab.—Karachi.

The whorls are described by Mr. Melvill as four in number, "supernis interdum rugosulis." This doubtless has reference to some curious oblique raised lines which pass over the spire on to the body-whorl. Whether this is a constant feature is uncertain, as I have only examined the type in the Museum. The colour of this shell is olive excepting the white thickened labrum and the anterior extremity of the body-whorl, and a pale line marks the suture. The denticles within the outer lip are rather strong, and only twelve in number in the type, not fifteen as stated in the original description.

Mr. Melvill observes that "the only other known smooth species of a uniform green or olive hue is *E. Prayensis*, Rochebrune, from the Cape Verde Islands". Such, however, is not the case, for I have seen numerous examples of *Maugera* of a distinctly olive or greenish colour, and some specimens of *E. lachryma* and *E. columbella* are more or less

¹ Proc. Linn. Soc. N.S.W., 1901, vol. xxvi, p. 375.

of the same tint. The denticles on the columella of *E. olivaria* are not very distinct. They are eleven or twelve in number, two or three about the middle being almost obsolete.

11. *ERATO LACHRYMA* (Gray), Sowerby.

Erato lachryma, Gray, p. 17; Sowerby (*a*), p. 17, fig. 48.

Hab.—New South Wales (Sowerby); New Holland (Gray); Queensland (J. E. Cooper in Brit. Mus.); Mast Head Reef, Capricorn Group, Queensland (Hedley); Sunday Island, Kermadec Group (T. Iredale).

The only figure at all resembling this species is the one quoted above. Those in the Thesaurus (figs. 4–6) and Conch. Icon. (figs. 9*a*–*b*) represent examples of the var. *callosa*, and the figures given by Weinkauff (pl. xxvi, figs. 9–10) are very unsatisfactory, both as regards colour and the denticulation of the outer lip.

The description given by Gray of the colour, "white, with three bright crimson cross bands," or that of Sowerby, "whitish, with three red transverse bands," correctly indicates the coloration of the typical form of this species, which apparently is restricted to East Australia. The apical whorls are generally yellowish olive or amber, and the anterior tip of the body-whorl is also stained with pale olivaceous brown. The three red bands are most distinct dorsally, the uppermost at the upper part of the body-whorl being the broadest, and the intermediate one is just below the middle. They do not extend on to the labrum. On the ventral side the uppermost one is the most apparent, the lowermost is less pronounced, and the central one is almost obsolete. The labrum has from twenty to twenty-two denticles in the largest specimens, and rather fewer in smaller ones. At the anterior end of the columella there are four or five transverse denticles, but the upper part is quite smooth.

VAR. *CALLOSA*, A. Adams & Reeve.

Erato callosa, Ad. & Reeve., Samarang, Moll., p. 25, pl. x, figs. 32*a*–*b*; Sowerby (*b*), p. 82, figs. 35–7; Tryon, p. 9, pl. iv, figs. 38, 39 (after Sowerby); pl. ii, fig. 7, radula (after Troschel, Gebiss Schneck., vol. i, p. 216, pl. xviii, fig. 5).

E. sulcifera, Sowerby & Reeve (*non* Gray), Sowerby (*b*), p. 81, figs. 1–3; Reeve (*b*), figs. 14*a*–*b*.

E. guttata, Sowerby (*b*), p. 82, figs. 29, 30; Reeve (*b*), fig. 15.

E. lachryma, Sowerby & Reeve (*non* Gray), Sowerby (*b*), p. 82, figs. 4–6; Reeve (*b*), figs. 9*a*–*b*.

Hab.—China Sea (Ad. & Reeve.); Japan (Lischke, Dunker, Pilsbry, Brit. Mus.); Mauritius (Sowerby).

This variety differs from the typical form only in colour. Lischke, in his most excellent work, *Japan. Meeres-Conch.*, pt. ii, p. 68, notices the closeness of *E. lachryma* of Sowerby & Reeve with the present variety. This misidentification of the two English authors doubtless also led Pilsbry to quote the *E. lachryma* as Japanese (Cat. Marine Moll. Japan, 1895, p. 52).

The *E. callosa* of Reeve¹ I have already shown to be a small example of *E. levis*. I have not quoted Weinkauff's figures (pl. xxv, figs. 2, 3), as they do not represent the form of the true *callosa*, perhaps the artist's fault, being too broad at the shoulder, and the aperture, described in the text "latiuscula", is too broad anteriorly. On the contrary, the mouth in this species is narrow, linear, and not at all dilated in front.

The typical colour is described as "carnea, subtus albicante", but some specimens are olivaceous dorsally, interrupted with a pale line at the shoulder.

A feature which is fairly constant is a pale-brown edge to the anterior caual. As in other species of the genus there is considerable variation in the size of specimens. Large examples are 7 mm. in length, whilst some small ones are only $4\frac{1}{2}$ mm.

Under *E. sulcifera* I have shown that Reeve's and Sowerby's identification of that species was erroneous, and that the shells depicted by them were in fact worn examples of the present species.

Var. RECONDITA, Melvill & Standen.

Erato recondita, M. & St., Ann. Mag. Nat. Hist., 1903, vol. xii, p. 302, pl. xxi, figs. 9, 10.

Hab.—Gulf of Oman, 156 fathoms (M. & St.); China (Brit. Mus.).

There is very little to distinguish this variety from the var. *callosa* excepting the entire absence of colour, and the labrum is perhaps a little more produced behind. The number of denticles upon it is the same, about twenty to twenty-two, the columella is indistinctly denticulate in the same manner, and the whorl within the crenate edge is similarly excavated ("*Columella excavata*," Ad. & Rve.). No mention is made by Melvill & Standen of the columellar denticulation, but, although indistinct, about twenty faint denticles are observable in one specimen under a strong lens. A few upon the anterior end are quite distinct. The var. *haplochila* I regard merely as an undeveloped young shell, and although described as having a simple non-denticulate labrum, fine incipient denticles are present in the type-specimen, as shown in the figure (fig. 10). The number of labral denticles in fig. 9 is considerably exaggerated. Four specimens from China lately added to the Museum collection agree in all respects with those from the Gulf of Oman. They have the appearance also of being from deep water.

12. ERATO SANDWICHENSIS, Pease (emend.).

Erato Sandwichensis, Pease, Proc. Zool. Soc., 1860, p. 146; Reeve (*b*), figs. 17*a*–*b*; Tryon, p. 9, pl. iv, fig. 35 (after Sowerby).

E. Sandwichensis, Sowerby (*b*), p. 82, figs. 21, 22; Weinkauff, p. 154, pl. xxvi, figs. 14, 15 (after Reeve); Martens & Langkavel, Donum Bismarck, p. 20, pl. i, figs. 13*a*–*b* (bad).

Hab.—Sandwich Islands.

¹ Lischke, loc. cit., also remarks upon the difference between Reeve's shell and the true *callosa*.

Only four worn specimens have been examined. In this condition they are smooth, and do not show any signs of granulation. It is of narrow form like typical *sulcifera*, and like that species has a very narrow aperture. The labral denticles are close-set, and from twenty-two to twenty-four in number. The lower or anterior end of the columella is distinctly denticulate, but further up the denticles become very minute, and gradually obsolete posteriorly. The colour is accurately described by Pease, but Sowerby's "pallide rosea" is purely imaginary, and his figure, tinted a delicate pink, is equally misleading. The figure given by Reeve and copied by Weinkauff is fairly good. It is very closely allied to *E. lachryma*, but may be a trifle more slender, has a slightly narrower aperture, and the rosy tint of the apex and anterior extremity is peculiar. Largest specimen $5\frac{1}{2}$ mm. in length, 3 mm. in diameter.

13. *ERATO BIMACULATA*, Tate.

Erato bimaculata, Tate, Trans. and Proc. Phil. Soc. Adelaide, 1877-8, p. 88; Tate & May, Proc. Linn. Soc. N.S.W., vol. xxvi, p. 375, pl. xx, fig. 5.

Hab.—St. Vincent's Gulf, Spencer's Gulf, South Australia (Tate); Tasmania, N.W. Coast (Tate & May).

The figure above quoted is not of much use beyond giving some idea of the general form of the species. The characteristic rosy spots at both ends are very striking, and at once distinguish this species from the rest. The columella is said by Tate to have "eight crowded transverse plaits". It may, however, be crenulated the whole length, the denticulation at and above the middle being very minute. Within this the whorl is broadly and deeply excavated.

14. *ERATO SULCIFERA* (Gray), Sowerby.

Erato sulcifera, Gray, p. 16; Sowerby (*a*), p. 17, fig. 46; Tryon, p. 11, pl. iv, fig. 51 (copy of Sowerby).

Ovulum corrugatum, Hinds, Voy. Sulphur, Mollusca, 1844, p. 47, pl. xvi, figs. 5, 6.

E. corrugata, Sowerby (*b*), 1859, p. 82, pl. 219, figs. 10, 11; Weinkauff, p. 152, pl. xxvi, figs. 5, 6 (bad, useless); Tryon, p. 11, pl. iv, fig. 52 (copy of Sowerby).

E. nana (Duclos), Sowerby (*b*), p. 82, pl. 219, figs. 12, 18; Reeve (*b*), fig. 18 (bad); Tryon, vol. v, p. 11, pl. iv, fig. 53 (after Sowerby); Weinkauff, p. 155, pl. xxvi, fig. 16 (after Reeve).

E. Schmelztziana, Crosse, Journ. de Conch., 1867, vol. xv, p. 301, pl. xi, fig. 5; Weinkauff, p. 152, pl. xxvi, figs. 7, 8 (bad); Tryon, p. 11, pl. iv, figs. 54, 55 (after Crosse, but badly coloured).

Hab.—Cape of Good Hope (Sowb.); Durban and Port Shepstone (H. Burnup); Zanzibar, Mauritius, Seychelles, Amirantes (Brit. Mus.); New Guinea (Hinds for *corrugata*); Mindoro, Philippines (Sowb. for *corrugata*); Port Jackson (Angas for *corrugata*); Fiji (Crosse for *Schmelztziana*); Samoa Island (U.S. Nat. Mus.); Sunday Island, Kermadec group (T. Iredale for *corrugata*).

After carefully studying the shells described under the above four names I am of opinion that they belong to a single species. They are all more or less granular, with a dorsal groove, which, however, is absent in some smooth or only partly granose varieties. All are red-tipped anteriorly, and the character of the labral and columellar dentation is quite the same, although the actual number of teeth may vary somewhat according to the length of the labrum, the larger specimens having more than the smaller ones. Some examples from Mauritius are peculiar in the absence of a dorsal sulcus, and in being much smoother than typical specimens. There are, however, scattered minute granules upon the body-whorl, and the spire is distinctly granose. They offer no difference in form or colour. Some of the specimens from Port Shepstone belong to this smooth variety, but others are normally granular. The *E. sulcifera* of Sowerby's Thesaurus is a combination of *E. lachryma*, var. *callosa*, and the var. *Panamensis* of *E. levis*. Figs. 1, 2 represent worn and dead specimens of *E. lachryma*, var. *callosa*, and fig. 3 is, as stated by Sowerby, the var. *Panamensis* (of *levis*). The dorsal groove indicated in the figures is quite imaginary, as in the specimens in the Cuming Collection there is no indication of it, nor is it shown in Reeve's figure (Conch. Icon., fig. 14*b*), where one of the two Cumingian shells labelled *sulfifera* is depicted. Weinkauff (p. 153, pl. xxvi, figs. 11, 12) has merely copied Reeve's figures, and based his description upon them.

15. ERATO GALLINACEA, Hinds.

Ovulum gallinaceum, Hinds, Zool. Sulphur, 1844, p. 47, pl. xvi, figs. 1, 2.

Erato gallinacea, Sowerby (*b*), p. 83, figs. 33, 34; Reeve (*b*), figs. 7*a-b*; Weinkauff, p. 150, pl. xxv, figs. 14, 15; Tryon, p. 10, pl. iv, fig. 46 (after Sowerby).

E. angulifera, Sowerby (*b*), 1859, p. 83, figs. 25, 26; Reeve (*b*), figs. 6*a-b*; Weinkauff, p. 146, pl. xxv, figs. 1, 4; Tryon, p. 10, fig. 47 (after Sowerby).

Hab.—New Guinea and Straits of Macassar (Hinds); Mindoro, Philippines (Cuming); Torres Straits (Tryon); Borneo for *angulifera* (Sowerby); Paternoster and Kei Islands, Bima (Schepman).

This specimen is well characterized by its triangular pyriform shape, the very narrow linear aperture, the broad thickened labrum with the liræ extending almost across it, and similar liræ across the end of the body-whorl. A feature overlooked in all descriptions is the presence of a brown spot at the posterior end of the labrum and at the anterior extremity of the body-whorl. These spots are present in nearly all fresh specimens, but may not be noticeable in dead and worn shells. *E. angulifera*, founded on a few small worn specimens, possesses all the essential features of *gallinacea*.

No mention is made in the monographs by Reeve, Weinkauff, or Tryon of the "spira minutissime granulata" of Hinds, which is copied by Sowerby.

16. *ERATO* *ANGISTOMA*, Sowerby.

Erato angistoma, Sowerby (*a*), p. 18, fig. 51; Reeve (*b*), fig. 13; Tryon, p. 10, fig. 44 (copy of Sowerby).

E. angyostoma, Sowerby (*b*), p. 83, figs. 19, 20, 23, 24.

E. pellucida, Reeve (*b*), fig. 16.

Hab.—Luzon, Philippines (Sowerby); East Indies (Sowerby and Reeve); Singapore (S. Archer); Port Jackson (Angas); Bombay (Reeve and Brit. Mus. for *pellucida*); Mast Head Reef, Capricorn Group, Queensland (Hedley).

I have not quoted Weinkauff in the above synonymy, as I do not feel sure that the shell figured by him (pl. xxvi, figs. 3, 4) belongs to this species. It is said to be 5 mm. in length, whereas the largest example I have seen is only 4 mm. *E. pellucida*, Reeve, is absolutely the same as the present species. The labral teeth are fine and numerous, about twenty-three in number.

17. *ERATO* *OLIGOSTATA*, Dall.

Erato oligostata, Dall, Nautilus, 1902, vol. xvi, p. 44; Bull. Mus. Comp. Zool. Harvard, vol. xliii, No. vi, p. 324, pl. xi, fig. 8.

Hab.—Bay of Panama.

A minute species with a hidden spire, "pale olive green, with the extremity of the canal deep rose pink."

The following species described or placed in *Erato* do not belong to this genus:—

a. *Erato guttula*, Sowerby (*a*), p. 18, fig. 50; Reeve (*a*), p. 261, pl. 285, figs. 8, 9.

Hab.—Mauritius.

The description of the "columellar lip with three folds anteriorly" and of the outer lip, "very minutely and indistinctly toothed along its inner margin," together with the figure, shows that this species is identical with *Marginella triplicata* of Gaskoin. The *E. guttata* [*sic*] of Sowerby (*b*) and Reeve (*b*) was founded on worn examples of the var. *callosa* of *E. lachryma*. Tryon, under *E. guttula*, reproduced Sowerby's figures of *guttata*, being under the impression that they represented the true *guttula*. Weinkauff noticed this species was a *Marginella*.

b. *Erato* (?) *cypræoides*, C. B. Adams, Proc. Boston Soc. Nat. Hist., 1845, vol. ii, p. 1.

Hab.—Jamaica.

Tryon (p. 10) considered this species "probably identical" with *E. Maugeæ*. A reference to the dimensions given by Adams shows, however, that it was a much larger shell he had before him, and I have no doubt that his species is the same as *Pachybatron marginelloideum* of Gaskoin. Adams's specimens appear to have been worn and faded and to have lost the markings, excepting the brown stain below the suture described both by him and Gaskoin.

- c. *Erato hæmatina*, Menke, Sowerby (*b*), p. 82, figs. 17, 18; Reeve (*b*), figs. 8a-b.

Hab.—Porto Rico.

This species, as pointed out by Weinkauff (p. 17), is the same as *Marginella hæmatita*, Kiener.

- d. *Erato minuta*, Reeve (*b*), fig. 11.

Hab.—Island of Ticao, Philippines.

This is a very small *Marginella* belonging to the same group as *M. pisum*, Reeve and others. The description is practically useless, no mention being made of the columellar folds.

It is pyriformly ovate, pellucid, glossy; spire almost concealed by callus, not raised; labrum thickened and incurved, whiter than the rest of the shell, not denticulated at the edge; columella with three strong folds anteriorly, and four smaller tubercles above. The front fold of all joins the labrum, forming the anterior end of the very narrow aperture.

The lip is described by Reeve as "rather thin", but as this monograph was written not long before his death, such errors are perhaps pardonable, and allowance may be made for the very unsatisfactory character of the whole production.

- e. *Erato pellucida*, Tenison-Woods, Report Roy. Soc. Tasmania, 1878, p. 35.

Marginella pellucida: Tryon, p. 11.

= *M. Stanislas*, Ten.-Woods, 1876: Tate & May, Proc. Linn. Soc. N.S.W., 1901, vol. xxvi, p. 362, pl. xxvi, fig. 82.

Hab.—Tasmania.

Undoubtedly a *Marginella*, and, as pointed out by Tate & May, evidently the same as *M. Stanislas*, under which name Mr. Tenison-Woods had already described it two years previously.

- f. *Erato lactea*, Hutton, Man. N. Zeal. Moll., 1880, p. 63.

= *Marginella muscaria*, Lam.: Gillies, Trans. N. Zeal. Inst., 1881, vol. xiv, p. 170.

= *M. formicula*, Lam.: Tryon, p. 12.

Hab.—New Zealand.

As indicated by Mr. Justice Gillies, this species is evidently the *Marginella muscaria* of Lamarck. I do not agree with Tryon (p. 23) in considering *M. formicula* the same as *muscaria*.